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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,748	07/18/2003	G. Patrick Martin	7162-104	2764

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EXAMINER	
FAULK, DEVONA E	
ART UNIT	**PAPER NUMBER**
2615	

MAIL DATE	DELIVERY MODE
10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/622,748	MARTIN, G. PATRICK	
	Examiner	Art Unit	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7/18/2003* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/30/2007 have been fully considered but they are not persuasive.

2. The applicant essentially asserts that the prior art or combination thereof fails to disclose a method for measuring hearing loss exclusive of the effects of tinnitus and two, the prior art or combination thereof fails to disclose or make obvious the exclusive to dispersion in the hearing channel. The applicant argues that prior Davis and Neumann fail to disclose measuring hearing loss exclusive of the effects of tinnitus or exclusively to dispersion in the hearing channel which the applicant has identified as meaning the same as exclusive of the effects of tinnitus. The examiner disagrees. The applicant discloses that tinnitus is often about 50dB over threshold of hearing and typically has frequencies above 1kHz. (page 3, paragraph 0003; page 8, paragraph 0025) and that exclusive of the effects of tinnitus means measuring the hearing loss above 50dB, therefore applying loudness contours at high acoustic input level well above the threshold of hearing and tinnitus (page 10, paragraph 0032, Figure 4). Davis clearly teaches measuring hearing loss exclusive of the effects of tinnitus (Figure 2 and Figure 4) because hearing loss is measure above 50 dB. This reads on the claim language. The examiner is maintaining the rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6, 7, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (US 6,682,472).

Davis teach a method for measuring hearing loss comprising performing a standard audiometric procedure (column 10, lines 11-18) which reads on selecting a series of audio tones within the normal range of hearing, and using the values in Table 2 to correct the audiometric readings for equal loudness (column 10,line 66-column 11, line 8) which reads on measuring a relative sensitivity of a test subject with respect to the ability to hear each of the audio tones. As taught in column 9,line60-column 10,line 10), the equal loudness contour is selected to be exclusive of the effects of tinnitus. Claims 1 and 17 are rejected. Regarding claims 2 and 3, the tones are reproduced at a level of 40 Phon for equal loudness. As to claims 6 and 7, the adjustment levels in table 2 describe the measuring of the sound intensity that exceeds the tinnitus noise level.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 8-12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 6,682,472) in view of Neumann, US Patent 4,680,798.

Davis does not disclose that the method involves configuring gain levels for frequency bands in a heating aid for compensation of the hearing loss measured. Neumann discloses an audio signal processing circuit for a hearing aid comprising microphone 12, a plurality of filters 28-35, variable amplifiers 44-51, and a digital controller. The amplifiers are used change the gain in individual frequency bands to compensate for tinnitus. Therefore, it was well known in the art to use a hearing aid to compensate for tinnitus. As a result, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Davis et al and Neumann to provide a hearing aid which uses variable amplifiers and band pass filters to compensate for a user's tinnitus for the purpose of improving hearing by use of gain control and tinnitus masking.

7. Claims 4,5, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 6,682,472) in view of John et al. (US 6,602,202).

Regarding claims 4 and 13, Davis teaches a method for measuring hearing loss comprising performing a standard audiometric procedure (column 10, lines 11-18) which reads on selecting a series of audio tones within the normal range of hearing, and using the values in Table 2 to correct the audiometric readings for equal loudness (column 10,line 66-column 11, line 8) which reads on measuring a relative sensitivity of a test subject with respect to the ability to hear each of the audio tones. As taught in column 9,line 60-column 10,line 10), the equal loudness contour is selected to be exclusive of the effects of tinnitus.

Davis fails to disclose determining a difference between said intensity measured for each of said tones and an intensity predicted by a standard loudness contour for each of said tones. John discloses measuring difference between expected or predicted results and observed or measured results (column 19, lines 32-45). It would have been obvious to modify Davis to measure the difference between the predicted results and the measured results as taught by John in order to achieve better hearing for the user.

Regarding claims 5 and 14, Davis discloses equal loudness contours. Davis fails to disclose that at least one loudness contour is a Fletcher-Munson Loudness Contour. The examiner takes official notice that Fletcher and Munson first measured equal loudness curves and that Fletcher Munson Loudness Contours are known in the art. It would have been obvious to modify Davis as modified to use a Fletcher Munson Loudness Contour so that a proven standard is used to measure loudness thus providing a better determination of hearing loss.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
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